

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listing, of claims in the application:

**Listing of Claims:**

1. (Currently amended) A method of monitoring the activity of roscovitine comprising
  - (i) administering roscovitine to a cell, group of cells, an animal model, a mammal or a human, and
  - (ii) detecting the presence of phosphorylated erk1and/or erk2.
2. (Previously presented) A method according to claim 1, wherein roscovitine is administered to a mammal.
3. (Previously presented) A method according to claim 1 or 2, wherein roscovitine is administered to a human.
4. (Previously presented) A method according to claim 1, wherein the group of cells is a cell culture.
5. (Currently amended) A method according to claim 5 4, wherein the cells are selected from HT29, KM12 and HCT116 cells.
6. (Currently amended) A method according to claim 2, wherein the ~~animal is an animal model a mammal~~ is a LoVo or KM12 xenograft mouse model.
7. (Currently amended) A method according to ~~any previous~~ claim 1, wherein the presence of phosphorylated erk1 and/or erk2 is detected in tumor cells or lymphocytes.

8. (Currently amended) A method according to ~~any preceding~~ claim 1, wherein erk1 and/or erk2 phosphorylation is monitored at least 24 hours after administration of roscovitine.
9. (Currently amended) A method according to ~~any preceding~~ claim 1, wherein erk1 and/or erk2 phosphorylation is monitored at least 48 hours after administration of roscovitine.
10. (Currently amended) A method according to ~~any preceding~~ claim 1, wherein the level of phosphorylated erk1 and/or erk2 is greater than that detected prior to administration of roscovitine.
11. (Currently amended) A method according to ~~any preceding~~ claim 1, further comprising monitoring the level of phosphorylated retinoblastoma (RB) protein.
12. (Currently amended) A method according to ~~any preceding~~ claim 11, wherein the level of phosphorylated retinoblastoma (RB) protein is less than that detected prior to administration of roscovitine.
13. (Currently amended) A method according to ~~any of claims 8 to 12~~ claim 12, wherein the level of phosphorylated erk1 and/or erk2 is monitored after 24 hours and the level of phosphorylated retinoblastoma (RB) protein is monitored at least 72 hours after administration of roscovitine.
14. (Currently amended) A method of assessing suitable dose levels of roscovitine comprising monitoring the degree and rate of erk1 and/or erk2 phosphorylation after administration of roscovitine to a cell, group of cells, animal model or human.

15. (Currently amended) A method according to claim 14, further comprising correlating the degree and rate of erk1 and/or erk2 phosphorylation with the known rate of inhibition of either CDK2 or RB phosphorylation by roscovitine at the same dosage, over the same time period.
16. (Currently amended) A method of monitoring the activity of roscovitine in a cassette dosing assay whereby a cocktail of roscovitine and other CDKI's are administered together and roscovitine activity is monitored in accordance with a method of claim 1 to 13.
17. (Currently amended) A method of identifying a candidate drug having roscovitine-like activity comprising administering said candidate drug to cell, group of cells, animal model or human and monitoring the presence or absence of erk1 and/or erk2 phosphorylation.
18. (Currently amended) A method according to any preceding claims 1, 14 or 16, wherein roscovitine is R-roscovitine.
19. (Cancelled)
20. (Cancelled)
21. (Cancelled)
22. (Currently amended) A kit for assessing the activity of roscovitine comprising antibodies for at least one of phospho-erk1 and/or phospho-erk2 and optionally antibodies for RB (whole), RB Ser780 or RB Ser608.

23. (Currently amended) A kit according to claim 22, ~~wherein the antibodies are for phospho erk1 or phospho erk2 alone or in combination with one of the further comprising RB antibodies.~~
24. (Currently amended) A kit according to claim 23, wherein the RB antibody is for RB Ser608, RB Ser780 or RB(whole).
25. A kit according to any of claims 22-24, wherein roscovitine is R-roscovitine.
26. (Cancelled)
27. (New) The method of claims 1, 14, 16 or 17, wherein erk1 and/or erk 2 phosphorylation is monitored using antibodies for erk1 and/or erk2.
28. (New) The method of claim 27, further comprising monitoring the level of phosphorylated retinoblastoma (RB) protein using antibodies for RB.